

Chemistry 298 Spring 2017
Syllabus

Instructor	Robin S. Tanke, Ph.D.
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Office:	D141 Science
Office Hours:	M, F 9 AM-10 AM, W Noon-1 PM or by appointment

Class Sessions: Thursday, 12 PM , SCI A112

Final Exam: Thursday, May 18th 12:30-2:30 PM

Learning Outcomes:

At the end of this course, students can:

- discuss the interest in nanoscience from a variety of scientific perspectives
- explain on a basic level unusual phenomena observed on the nanoscale
- explain on a basic level tools used to characterize nanomaterials
- provide multiple examples of nanomaterial preparation
- discuss several current and predicted applications of nanomaterials.

Prerequisite: Chem106 or Chem 117

Required Materials: The textbook, The Science of Nanotechnology: An Introductory Text, is available from text rental.

Grading: The tentative letter grades will be given as follows: "A" - 185 points, "B" 165 points, "C" 145 points, "D" 125 points.

1. Homework Assignments	80 points
2. Midterm exam	30 points
3. Deliberative Assignment	20 points
4. Literature Assignment	30 points
4. Final Exam	40 points
Total	200 points

Student Conduct:

Class attendance is mandatory and class preparation is expected. Assigned reading and viewing materials will often be included in class discussion so please come prepared.

Please be respectful of your classmates!

Students are reminded that they are to conduct themselves in accordance with the rules for academic conduct. The University of Wisconsin System and UWSP Chapter 14 of the Wisconsin Administrative Code, Rules of the Board of Regents of the University of Wisconsin System is to be followed by all students, staff, and faculty. A copy can be found at <http://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11>.

Disabilities: If you have disabilities and need any special accommodations, you should contact the office of Disability Services during the first two weeks of the semester.

Accommodations for Religious Beliefs: Religious beliefs will be accommodated according to UWS 22.03 provided I am notified during the first three weeks of classes.

This Course is a result of a NSF Nanotechnology in Undergraduate Education Initiative NUE: Sophomore Course and Ancillaries in Nanoscience (SCAN)

Robin Tanke Spring Semester 2017

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00		Research		Research	
09:00	Office Hour	↓		↓	Office Hour
10:00		↓		↓	
11:00	326 Lec 1 A121	WCC	326 Lec 1 A121		326 Lec 1 A121
12:00			Office Hour	298 Lec 1 A112	
13:00					
14:00	326 Lab 1 C134	326 Lab 2 C134	326 Lab 3 C134	Research	Meeting or Seminar
15:00	326 Lab 1 C134	326 Lab 2 C134	326 Lab 3 C134	↓	
16:00	326 Lab 1 C134	326 Lab 2 C134	326 Lab 3 C134	↓	

Chemistry 298 Tentative Schedule 2017

Date	Topic	Assignment due
1/26	Introduction to Nanotechnology and Explanation of Deliberative Assignment	
2/2	Nanotechnology Deliberative Assignment	Deliberative Assignment
2/9	Deliberative Assignment (Continued) Characterization Techniques 1	
2/16	Characterization Techniques 2	Assignment 1
2/23	Characterization Techniques 3	Assignment 2
3/2	Characterization Techniques 4/ SEM Field Trip with Dr. Riha- Schedule Time	Assignment 3
3/9	Synthesis of Nanomaterials 1	Assignment 4
3/16	MidTerm Exam	
3/23	SPRING BREAK	
3/30	Synthesis of Nanomaterials 2	
4/6	Synthesis of Nanomaterials 3	Assignment 5
4/13	Synthesis vis Chemical Vapor Deposition Dr. Riha	Assignment 6
4/20	Graphene and Carbon Nanotubes	Assignment 7
4/27	Physical Properties	Literature Assignment due
5/4	Optical and Magnetic Properties	Assignment 8
5/11	Sensors	
5/18	Final Exam Thursday, May 18th 12:30-14:30	